

IN THE CLAIMS

Please cancel claims 1 to 12 without prejudice or disclaimer.

Please amend claims 21 and 23 as follows:

1 – 12 (CANCELED)

13. (ORIGINAL) A treatment for increasing adhesion between joined first and second layers consisting essentially of initially roughening one of the layers, chlorinating the roughened layer, joining the first and second layers and heating the joined layers for a predetermined time, wherein the treatment increases the adhesion strength of the joined layers by at least a factor of about three times over similar untreated first and second layers.

14. (ORIGINAL) The treatment of claim 13, wherein the tensile strength of the joined layers is increased by at least a factor of about seven times over similar untreated first and second layers.

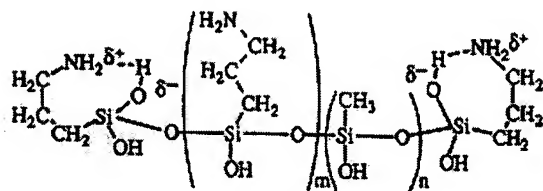
15. (ORIGINAL) The treatment of claim 13, wherein the step of joining comprises molding one of the first or second layers over the other said layer.

16. (ORIGINAL) The treatment of claim 13, wherein one of the first or second layers is a golf ball mantle and the other of the first or second layers is a golf ball cover.

17. (ORIGINAL) The treatment of claim 13, wherein one of the first or second layers is a golf ball mantle comprised of a material selected from at least one of polyurethane, ionomer, terpolymer, metallocene catalyzed polyolefin, polyamide block copolymer and polyester/polyether block copolymer and the other of the first or second layers is a golf ball cover comprised of a material selected from at least one of polyurethane, ionomer, terpolymer, metallocene catalyzed polyolefin, polyamide block copolymer and polyester/polyether block copolymer.

18. (ORIGINAL) The treatment of claim 13, wherein both of the first and second layers are roughened.
19. (ORIGINAL) The treatment of claim 13 wherein both of the first and second layers are roughened and chlorinated.
20. (ORIGINAL) The treatment of claim 13, wherein the step of initially roughening one of the layers comprises roughing the layer to a surface finish in the range of about 0.5 μin to about 2000 μin .
21. (CURRENTLY AMENDED) A game ball having enhanced interlayer adhesion comprising a first layer having a bonding surface, the bonding surface having an adhesion improvement treatment comprising treating the bonding surface with a silicone-based adhesion promoter and a second layer having a surface joined to the bonding surface, wherein the silicone-based adhesion promoter is a silsesquioxane oligomer.
22. (ORIGINAL) A game ball as in claim 21, wherein the game ball is a golf ball.
23. (CURRENTLY AMENDED) The game ball of claim 21, wherein one of the first or second layers is a golf ball mantle comprised of a material selected from at least one of polyurethane, ionomer, terpolymer, metallocene catalyzed polyolefin, polyamide block copolymer and polyester/polyether block copolymer and the other of the first or second layers is a golf ball cover comprised of a material selected from at least one of polyurethane, ionomer, terpolymer, metallocene catalyzed polyolefin, polyamide block copolymer and polyester/polyether block copolymer.
24. (CANCELED)

25. (ORIGINAL) The game ball of claim ~~24~~ 21, wherein the silsesquioxane oligomer is



where the subscripts m and n are chosen such that the molecular weight of the oligomer is from about 250 to about 650.

26. (ORIGINAL) The game ball of claim 21, wherein the treatment further comprises post treatment of the game ball at an elevated temperature for a predetermined amount of time.

27. (ORIGINAL) The game ball of claim 21, wherein the treatment further comprises at least one of roughening of a bonding surface, plasma treatment of a bonding surface, or chlorination of a bonding surface.

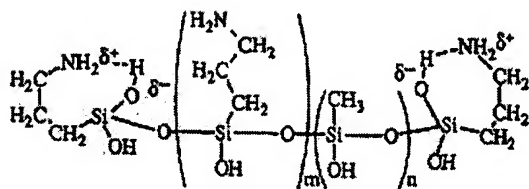
28. (ORIGINAL) A process for improving adhesion strength between a first surface and a second surface comprising:

treating the first surface with a silicone-based adhesion promoter; and
joining the second surface to the first surface.

29. (ORIGINAL) The process of claim 28, further comprising the step of roughening the surface of the first layer prior to treatment with the adhesion promoter.

30. (ORIGINAL) The process of claim 28, wherein the adhesion promoter is a silsesquioxane oligomer.

31. (ORIGINAL) The process of claim 30, wherein the silsesquioxane oligomer is



where the subscripts m and n are chosen such that the molecular weight of the oligomer is from about 250 to about 650.

32. (ORIGINAL) The process of claim 28, further comprising an adhesion promoting technique selected from the group consisting of plasma treatment, corona treatment, flame treatment, interlocking mechanical features, other chemical adhesion promoters, chlorination, ultraviolet treatment, infrared treatment, gamma rays, and e-beam treatment.